



SOLICITATION NO. F157721

CONTRACT NO. FSC 614  
Southern Waste Units Excavation/  
OSDF Phase II

**PART 9**  
**QUALITY REQUIREMENTS**

## **PART 9**

### **QUALITY REQUIREMENTS CONTRACT NUMBER FSC 614 SOUTHERN WASTE UNITS EXCAVATION/ ON-SITE DISPOSAL FACILITY - PHASE II**

#### **A. General Information**

The contractor shall incorporate the attached Construction Quality Assurance Plan (CQA) into the requirements of this contract. In addition to the attached CQA Plan, the Contractor shall develop a written supplemental Quality Assurance Plan (QAP) addressing the quality elements outlined in this Part 9.

These supplemental quality requirements combined with the CQA Plan will fulfill the requirements of Fluor Daniel Fernald (FDF) Quality Assurance Program Description (RM-0012), which satisfies the requirements of ANSI/ASME NQA-1, EPA QAMS-005/80, DOE Order 5700-6C, and 10 CFR Part 830.120. Those quality assurance elements not specified in other parts of the contract documents are included in this Part 9.

- B. Within (15) calendar days from Notice to Proceed, the contractor shall submit a QAP to the Construction Contracts Manager for review and approval. Work shall not begin till this plan is approved. The following quality elements shall be included in the QAP:

#### **1.0 ORGANIZATION**

- 1.1 Describe, and show with an organization chart, the contractor's organizational structure from the Contractor's home office support staff through key field management personnel who are specified in Part 6 of this contract. The functional titles and names of personnel shall be included in this chart.
- 1.2 Subtiers are part of the Contractor's organization and shall be included in the organizational structure as well as describing functional responsibilities and levels of authority.
- 1.3 Provide an outline for an orientation/training to be given by the contractor to employees and subcontractors on the necessity and expectation of performing quality work as addressed in the QAP. Attendance records of personnel attending orientation shall be maintained on-site as Quality Records.

#### **2.0 PERSONNEL TRAINING AND QUALIFICATIONS**

- 2.1 Describe in the QAP how the contractor shall assure project personnel receive the required specified FDF site training before performing work in the field. The contractor shall document necessary training, and a copy of training records shall be kept in the contractor's field office.

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- 2.2 Describe how the contractor shall assure personnel and sub-tier Subcontractors performing the work are suitably qualified to accomplish their assigned task. The contractor shall document qualification records and file these records in the Subcontractor's field office.
- 2.3 Show with a resume, the Q/A manager has a minimum of 5 years experience in landfill construction, and also show with a resume, the Q/C inspector has a minimum of 3 years experience in landfill construction. These resumes are not considered part of the QAP, but shall be an attachment to the document.

**3.0 QUALITY IMPROVEMENTS**

- 3.1 When the contractor's Quality Inspector verifies the subcontract material and workmanship does not meet the specified requirements, describe how these nonconformances will be documented on an approved NONCONFORMANCE Report form. The approved NONCONFORMANCE form shall be as specified in Section 5 of the Construction Quality Assurance (CQA) plan under "Problem Identification and Corrective Measures Report".
- 3.2 Describe how the contractor shall distribute NONCONFORMANCE Reports to FDF.
- 3.3 Describe how FDF shall be integrated in the approval process when evaluating the corrective actions required to close a NONCONFORMANCE report.
- 3.4 Describe how nonconforming materials and workmanship shall be controlled to prevent inadvertent use.

**4.0 DOCUMENTS AND RECORDS**

- 4.1 Control of FDF issued Controlled Documents
  - 4.1.1 Describe how FDF Controlled Documents will be managed to assure the following requirements are met:
    - A. Assure controlled documents issued by FDF are controlled by the contractor when reproduced and issued to sub-tier subcontractors and Contractor employees such that only current, controlled revisions are used for the work.
    - B. FDF transmittal forms shall be signed, indicating receipt of documents, and returned to FDF Construction Document Control (CDC) with a copy sent to the Construction Manager.

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- C. Certified for Construction documents received by the Contractor which do not have a "CDC/Controlled Copy" stamp with red control numbers shall be returned to (CDC) with a copy of transmittal sent to the Construction Manager.
- D. Superseded and canceled controlled documents shall be marked "VOID" and removed from the field work area. "VOID" drawings shall only be maintained in the Subcontractors field office.
- E. Controlled documents reproduced by the Contractor shall have a Contractor control number designated on the document in red. The Contractor shall maintain a log of their control numbers showing to whom they were issued.
- F. Work shall be performed from current documents marked "CDC/Controlled".
- G. Upon receipt of a FDF transmittal of controlled documents, the Contractor shall verify that the document numbers and revision numbers correspond with those on the transmittal. Deviations shall be reported to CDC and a copy of the transmittal sent to the Construction Manager.
- H. Approved Design Change Notices (DCN), containing the "CDC/Controlled" stamp shall be annotated by the Contractor on the affected controlled construction drawings and technical specifications. The annotated construction drawings are not considered red lined drawings.
- I. The Contractor shall routinely review documents used in the work to assure that current controlled documents are in use, that DCN'S are properly noted on the affected documents, and that work is performed in compliance with applicable subcontract documents.

**4.2 Control of Contractor Submittals**

- 4.2.1 Describe how and by which Contractor organizational position the following requirements will be met.
  - A. Submittals are made in accordance with the "Contractor Submittal Requirements" from Part 7 - Drawings & Technical Specifications.
  - B. Submittals are reviewed for accuracy, completeness and compliance with the subcontract requirements and so marked in accordance with Part 3 - General Provisions, "Specifications and Drawings for Construction".

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- C. Do not erase or obliterate Quality Records when revised. Quality Records are inspection reports, test reports, NONCONFORMANCE reports, and material certificates. Revisions shall be made using a line through the error or items deleted and initialed and dated by the person making the revision. 4.3  
Maintenance of Subcontract Documents

4.3.1 Describe how subcontract documents will be maintained.

**5.0 WORK PROCESSES**

- 5.1 Describe how work procedures shall be developed for special work processes such as welding High Density Polyethylene (HDPE) pipe, geomembrane seam welding, continuity and tensiometer testing of geomembrane, hydrostatic testing of HDPE pipe, HDPE pipe inspection by video camera, and repair procedures for HDPE pipe and geomembrane liner. Special work processes that are not in this listing but are in the technical specifications of this contract shall be addressed with a procedure.

**6.0 DESIGN**

- 6.1 Describe how and by whom As-built drawings shall be maintained for Contractor issued drawings to meet the following requirements.
  - 6.1.1. Provisions of Part 4, Special Conditions, As-Built Redline drawings, applies.
  - 6.1.2. The redlined documents shall be clearly identified as containing as-built information. they shall be clear, concise, up-to-date, legible representation of Contract changes.

**7.0 PROCUREMENT**

- 7.1 Describe the Contractor procurement program which shall address the following:
  - 7.1.1. Show how contract requirements are invoked for procurement of items and services within the Contractor's and any subtler organization.
  - 7.1.2. Describe the method and documentation process for accepting purchased items.
  - 7.1.3. Describe how nonconforming items shall be tagged and segregated from acceptable items.

**8.0 INSPECTION AND ACCEPTANCE TESTING**

- 8.1 Describe how the Q/C Inspector maintains independence from field supervision.

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- 8.2 Describe how inspections are planned, performed, and documented to assure work is in compliance with the acceptance criteria specified in this contract.

**9.0 MANAGEMENT ASSESSMENT**

- 9.1 Describe how contractor senior management shall conduct periodic overviews of this contract to assure it is in compliance with their QA Program and contract requirements.

**10.0 INDEPENDENT ASSESSMENT**

- 10.1 FDF Quality Assurance will conduct periodic oversight of the Contractor's Quality Program. The Contractor shall cooperate with FDF in the identification, control, correction, and reporting of material and process deficiencies.
- 10.2 The Contractor shall provide FDF personnel access to work being done and to project documentation. FDF QA/QC monitoring may include, but not limited to; inspection of materials, inspection of work in progress , and programmatic surveillances.